

CONCORDIA UNIVERSITY



GRADUATE STUDIES AND RESEARCH IN MECHANICAL ENGINEERING

The Department of Mechanical Engineering offers programs of graduate study and research, leading to the Master's and Doctoral degrees. The programs are available on both a full and a part-time basis. The department has well developed laboratory facilities and is actively engaged in graduate research in the following areas of Mechanical Engineering:

Research Areas

Fluid Control Systems

- Low Cost Automation
- Hydraulics and Pneumatic Systems
- Air Braking System
- Vortex Flow Studies
- Hydrostatic Transmission

Thermo-Fluid Engineering

- Energy Conversion
- Combustion
- Numerical Simulation

- Finite Difference
- Finite Element

- Jet Cutting
- Heat Transfer

Mechanical Systems

- Vibration Control
- Optimization of Mechanical Systems
- Surface Mechanics
- Mechanisms
- Manufacturing, Production (Deep Hole Boring and Hydraulic Profiling)
- Bio-Dynamics
- Stress Analysis

Materials Science

- Hot Working of Metals
- Mechanical Metallurgy
- Dislocations Theory

Facilities

Fully equipped laboratories for research in Fluid Controls. Low Cost Automation, Machine Tools and Surface Measurements, Noise and Vibrations. Hydraulic Copying, Heat Transfer, Combustion, Shock Dynamics etc...

Complementary Faculty facilities include Instrumentation Centre, Computer Labs and Machine Shop.

Financial Assistance

Financial assistance in the form of graduate fellowships, teaching fellowships, and teaching or research assistantships is available for full-time students of high standing.

FOR FURTHER INFORMATION
PLEASE CONTACT THE DEPARTMENT
CHAIRMAN.

FOR APPLICATION FORMS AND
REGISTRATION INFORMATION,
PLEASE WRITE:

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The Mechanical Engineering Faculty

Blach, A., M.Eng., Concordia
Equipment Design and Stress Analysis
Cheng, R.M.H., Ph.D., Birmingham
Control and Automation
du Plessis, M.P., Ph.D., Alberta
Fluid Dynamics, Energy Conversion,
Jet Cutting
Habashi, W.G., Ph.D., Cornell
Finite Element and Finite Difference
Aerodynamics. Methods in Fluid
Mechanics
Hoa, V.S., Ph.D., Toronto
Stress Analysis, Solid Mechanics
Katz, S., Ph.D., Oklahoma State
Fluidics, Control Systems
Krakow, K., M.Sc., Cal. Tech.
Turbo-machines, HVAC
Kwok, C.K.C., Ph.D., McGill
Fluid Control, Vortex Flows
Lilley, D.G., Ph.D., Sheffield
Combustion, Fluid Dynamics,
Swirling Flows
Lin, S., D.Eng., Karlsruhe
Heat Transfer, Solar Energy
McQueen, H., Ph.D., Notre Dame
Social Impacts of Technology,
Metallurgy, Manufacturing
Neemeh, R.A., Ph.D., McGill
Gas Dynamics, Shock-Wave Dynamics
Osman, M.O.M., D.Sc., Swiss Inst. Tech.
Mechanisms, Manufacturing Processes
Saber, A.J., Ph.D., Princeton
Combustion, Flame Stability
Sankar, S., D.Eng., Concordia
Hydro-Mechanical Systems, Vibration
Control, Optimization
Sankar, T.S., Ph.D., Waterloo
Random Vibrations, Bio-Dynamics
Machine Reliability
Svoboda, J., D.Eng., Concordia
Fluid Power Control
Xistris, G.D., M.E., McGill
Machinery Preventive Maintenance
Signal Analysis

